

AD-A166 503

2



DTIC  
ELECTE  
APR 16 1986  
S D

# AIR COMMAND AND STAFF COLLEGE

## STUDENT REPORT

JOB ATTITUDES OF  
PACIFIC AIR FORCE PERSONNEL

MAJOR JOSEPH C. MENENDEZ 86-1730

*"insights into tomorrow"*

Approved for Public Release  
Distribution Unlimited

86 4 15 14 L

DTIC FILE COPY

## DISCLAIMER

The views and conclusions expressed in this document are those of the author. They are not intended and should not be thought to represent official ideas, attitudes, or policies of any agency of the United States Government. The author has not had special access to official information or ideas and has employed only open-source material available to any writer on this subject.

This document is the property of the United States Government. It is available for distribution to the general public. A loan copy of the document may be obtained from the Air University Interlibrary Loan Service (AUL/LDEX, Maxwell AFB, Alabama, 36112) or the Defense Technical Information Center. Request must include the author's name and complete title of the study.

This document may be reproduced for use in other research reports or educational pursuits contingent upon the following stipulations:

-- Reproduction rights do not extend to any copyrighted material that may be contained in the research report.

-- All reproduced copies must contain the following credit line: "Reprinted by permission of the Air Command and Staff College."

-- All reproduced copies must contain the name(s) of the report's author(s).

-- If format modification is necessary to better serve the user's needs, adjustments may be made to this report--this authorization does not extend to copyrighted information or material. The following statement must accompany the modified document: "Adapted from Air Command and Staff Research Report \_\_\_\_\_ (number) \_\_\_\_\_ entitled \_\_\_\_\_ (title) by \_\_\_\_\_ (author) \_\_\_\_\_."

-- This notice must be included with any reproduced or adapted portions of this document.



**REPORT NUMBER** 86-1730

**TITLE** JOB ATTITUDES OF PACIFIC AIR FORCE PERSONNEL

**AUTHOR(S)** MAJOR JOSEPH C. MENENDEZ, USAF

**FACULTY ADVISOR** CAPT THOMAS M. MCFALL, LMDC/AN

**SPONSOR** MAJOR MICKEY R. DANSBY, LMDC/AN

Submitted to the faculty in partial fulfillment of  
requirements for graduation.

AIR COMMAND AND STAFF COLLEGE  
AIR UNIVERSITY  
MAXWELL AFB, AL 36112

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

## REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b. RESTRICTIVE MARKINGS NONE		
2a. SECURITY CLASSIFICATION AUTHORITY N/A			3. DISTRIBUTION/AVAILABILITY OF REPORT  <b>STATEMENT "A"</b> Approved for public release Distribution is unlimited		
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE N/A					
4. PERFORMING ORGANIZATION REPORT NUMBER(S) 86-1750			5. MONITORING ORGANIZATION REPORT NUMBER(S)		
6a. NAME OF PERFORMING ORGANIZATION ACSC/EDCC		6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MONITORING ORGANIZATION		
6c. ADDRESS (City, State and ZIP Code) Maxwell AFB AL 36112-5542			7b. ADDRESS (City, State and ZIP Code)		
8a. NAME OF FUNDING/SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER		
8c. ADDRESS (City, State and ZIP Code)			10. SOURCE OF FUNDING NOS.		
			PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.
11. TITLE (Include Security Classification) JOB ATTITUDES OF PACIFIC			WORK UNIT NO.		
12. PERSONAL AUTHOR(S) Menendez, Joseph C., Major, USAF					
13a. TYPE OF REPORT		13b. TIME COVERED FROM _____ TO _____		14. DATE OF REPORT (Yr., Mo., Day) 1986 April	
				15. PAGE COUNT 76	
16. SUPPLEMENTARY NOTATION ITEM 11: AIR FORCE PERSONNEL					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB. GR.			
19. ABSTRACT (Continue on reverse if necessary and identify by block number) The study uses statistical analyses of data collected by the Leadership and Management Development Center (LMDC) to compare job attitudes of personnel assigned to the Pacific Air Force (PACAF), with those of USAF personnel assigned to other commands and theaters. The data base was arranged according to two major categories, PACAF and other USAF personnel. These were then organized into three personnel categories: officers, enlisted, and civilian personnel. The comparison of these subcategories shows that job attitudes for PACAF personnel differed significantly from other USAF personnel in 15 of 21 measured attitudinal factors. The study finds PACAF personnel generally show greater job satisfaction than USAF personnel assigned elsewhere.					
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS <input type="checkbox"/>			21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED		
22a. NAME OF RESPONSIBLE INDIVIDUAL ACSC/EDCC Maxwell AFB AL 36112-5542			22b. TELEPHONE NUMBER (Include Area Code) (205) 293-2483		22c. OFFICE SYMBOL

## PREFACE

Recognizing the impact of worker attitudes on productivity, mission effectiveness and retention, this study makes use of existing survey data to analyze job attitudes among personnel in the U.S. Pacific Command. Data previously collected by the Leadership and Management Development Center (LMDC) at Maxwell AFB, Alabama, are used to make comparisons and conduct analyses of respondents' attitudes toward their jobs. As of this writing the data are maintained at LMDC data banks but will soon be relocated to the Air Force Human Resources Laboratory at Brooks AFB, Texas.

At the request of LMDC, the format of this study differs slightly from the recommended ACSC format so as to conform to the American Psychologist Association's Publication Manual. A note of appreciation is extended to LMDC personnel for their assistance and guidance in this undertaking.

Accession For	
NTIS CRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution /	
Availability Codes	
Dist	Avail and/or Special
A-1	



---

## ABOUT THE AUTHOR

---

Major Joseph C. Menendez is a United States Air Force officer with experience as a pilot and as an assistant air attache. He has served as instructor pilot in the T-38 and B-52 aircraft. He has served as Assistant Air Attache to the Republic of the Philippines where he also flew the C-12 aircraft. He has a Bachelor of Arts Degree in Education, a Master of Science Degree in Management Information Systems and a Master of Arts Degree in National Security Affairs. He is a graduate of the Defense Language Institute, the Naval Postgraduate School, the Defense Intelligence College, and the Air Command and Staff College.

---

---

# TABLE OF CONTENTS

---

---

Preface.....	iii
About the Author.....	iv
List of Illustrations.....	vi
Executive Summary.....	vii
CHAPTER ONE--INTRODUCTION.....	1
CHAPTER TWO--LITERATURE REVIEW	
Organizational Behavior.....	5
Measurement Variables.....	7
Satisfaction.....	7
Leadership.....	8
Reenlistment.....	10
Summary.....	11
CHAPTER THREE--METHOD	
Instrumentation.....	13
Data Collection.....	14
Subjects.....	15
Procedure.....	16
CHAPTER FOUR--RESULTS	
Demographic Data.....	19
Attitudinal Data.....	20
CHAPTER FIVE--DISCUSSION	
Review.....	23
Factors.....	25
Summary.....	28
Conclusion/Recommendation.....	29
REFERENCES.....	31
APPENDICES:	
Appendix A--Demographic Data.....	33
Appendix B--Comparison of OAP Factor Scores Between PACAF and Other Air Force Personnel.....	43
Appendix C--Organizational Assessment Package: Factors & Variables.....	53

## LIST OF ILLUSTRATIONS

TABLE 1--Sex by Personnel Category.....	19
TABLE 2--Age by Personnel Category.....	20
TABLE 3--Ethnic Group by Personnel Category.....	20
TABLE 4--Factor Summary: Mean Scores and Significant Differences.....	21
TABLE A-1--Number of Respondents by Personnel Category.....	34
TABLE A-2--Sex by Personnel Category.....	34
TABLE A-3--Age by Personnel Category.....	34
TABLE A-4--Time in Air Force.....	35
TABLE A-5--Months in Present Career Field.....	35
TABLE A-6--Months at Present Duty Station.....	35
TABLE A-7--Months in Present Position.....	36
TABLE A-8--Ethnic Group.....	36
TABLE A-9--Marital Status.....	36
TABLE A-10--Spouse Employment Status: PACAF.....	37
TABLE A-11--Spouse Employment Status: Data Base.....	37
TABLE A-12--Educational Level.....	37
TABLE A-13--Professional Military Education.....	38
TABLE A-14--Number of People Directly Supervised.....	38
TABLE A-15--Number of People for Whom Respondent Writes APR/OER/Appraisal.....	39
TABLE A-16--Supervisor Writes Respondent's APR/OER/Appraisal.....	39
TABLE A-17--Work Schedule.....	40
TABLE A-18--Supervisor Holds Group Meetings.....	40
TABLE A-19--Supervisor Holds Group Meetings to Solve Problems.....	40
TABLE A-20--Aeronautical Rating and Current Status....	41
TABLE A-21--Career Intent.....	41
TABLE B-1--Comparison of OAP Scores Between PACAF and Other USAF Personnel: The Work Itself.....	44
TABLE B-2--Comparison of OAP Scores Between PACAF and Other USAF Personnel: Job Enrichment.....	46
TABLE B-3--Comparison of OAP Scores Between PACAF and Other USAF Personnel: Work Group Process..	49
TABLE B-4--Comparison OF OAP Scores Between PACAF and Other USAF Personnel: Work Group Output...	50





## EXECUTIVE SUMMARY

Part of our College mission is distribution of the students' problem solving products to DoD sponsors and other interested agencies to enhance insight into contemporary, defense related issues. While the College has accepted this product as meeting academic requirements for graduation, the views and opinions expressed or implied are solely those of the author and should not be construed as carrying official sanction.

*"insights into tomorrow"*

### REPORT NUMBER

86-1730

### AUTHOR(S)

MAJOR JOSEPH C. MENENDEZ

### TITLE

JOB ATTITUDES OF PACIFIC  
AIR FORCE PERSONNEL

I. **Purpose:** To ascertain whether significant differences exist between the job attitudes of personnel assigned to the Pacific Air Forces (PACAF) and the job attitudes of personnel in other commands and theaters throughout the Air Force.

II. **Background:** Employee job attitudes can have a significant impact on unit effectiveness. Similarities between job roles and task characteristics of PACAF personnel and other USAF personnel indicate that the attitudes displayed by these groups will not vary significantly from one another. However, these differences can be measured and evaluated. Current literature reveals that it is important and necessary to accurately predict and analyze these differences so as to apply corrective intervention where deemed necessary. The Leadership and Management Development Center (LMDC) at Maxwell AFB, Alabama has developed the Organizational Assessment Package (OAP) instrument to help in assessing job attitudes and identifying possible management improvement areas for organizations.

III. **Procedure & Results:** The present research capitalizes on data collected by the LMDC during numerous administrations of the OAP at the invitation of unit commanders throughout the Air Force. The data were divided into two categories:

## CONTINUED

PACAF personnel and USAF personnel assigned to other commands and theaters. A demographic comparison is then conducted according to the three subcategories of officers, enlisted, and civilian personnel. For the comparison of attitudinal data, statistical analyses were conducted using standard inferential statistics at the 95% confidence level. Two-tailed t-tests were performed to discern any differences between groups within each personnel category in 21 attitudinal factors. Results show that statistically significant differences exist between the job attitudes of PACAF personnel and those of other USAF personnel in 15 of the 21 factors measured by the OAP. While statistical differences exist in 15 factors, the differences were generally small and generally limited to only one of the three personnel categories. In seven of the factors, however, differences exist in two or more personnel categories. These seven factors are discussed in detail. For all seven factors, the PACAF sample group had higher mean scores, indicating greater job satisfaction than the data base group. The seven factors wherein significant differences exist for two or more personnel categories are Work Repetition, Job Motivation Index, Work Support, Organizational Communications Climate, Advancement-Retention, Work Group Effectiveness, and General Organizational Climate.

IV. Conclusion/Recommendations: The study concludes that a greater degree of job satisfaction exists among PACAF personnel than among USAF personnel assigned to other commands and other theaters. As a result it is determined that existing managerial practices, procedures and techniques are working well and should not be interfered with. The possibility exists that other theaters/commands experiencing difficulties with work related satisfaction among assigned personnel may wish to emulate the PACAF practices.

## Chapter One

### INTRODUCTION

A 1983 study conducted for the Army Research Institute found that dissatisfied soldiers not only do not reenlist, but they are unlikely to give any credence to management efforts to convince them that their next assignment will bring them any more satisfaction (Motowidlo & Lawton, 1984). This study highlights the need for commanders and functional managers, at all levels, to know the job attitudes of the men and women they supervise. The present work examines job attitudes within one Air Force major command, Pacific Air Forces (PACAF), in the hope that the information presented will help PACAF commanders and supervisors increase job satisfaction within the command.

People issues are important in PACAF, especially since "Manpower accounts for more than 59 percent of PACAF's total annual budget for accomplishing mission requirements" (PACAFP 26-4 1985, Foreword). The people of PACAF include over 36,500 officers, enlisted personnel and civilians working together to accomplish the defense mission in the Pacific theater. Because the PACAF mission is unique, this paper explores significant differences between job attitudes of

personnel assigned to PACAF and those of personnel in other USAF commands. Before looking at the job attitudes of PACAF's people, however, further description of PACAF's scope and mission is in order.

PACAF, as the air component of Pacific Command, conducts and coordinates offensive and defensive air operations as its primary mission (Fact Sheet 83-20, 1983). The men and women who are responsible for performing this mission are a valuable resource, and PACAF must "compete with other MAJCOMs for limited manpower resources in the Five-Year Defense Program" (PACAFP 26-4, 1985, p. 3). PACAF personnel constraints include ceilings on numbers of officers, airmen and civilians; paygrade allocations; the number of rated personnel; and headquarters management personnel (PACAFP 26-4, 1985). Since manpower is a limited resource, it is vital that PACAF leaders make valid, timely assessments of the organizational environment, so as to implement effective change when necessary or perpetuate existing practices where they are successful.

In Organizational Assessment, the authors attempt to highlight the need for, and possible uses of organizational assessment data (Lawler, Nadler, & Camman, 1980). The data are useful and necessary for internal decision makers, decision makers outside the organization and researchers. This study is concerned specifically with the decision maker and the use of job attitude information in job choice

decisions, human resources management decisions, systematic diagnosis and change, program evaluation, resource allocation decisions, regulation and control, and public policy formulation (Lawler et al., 1980). When analyzed and used properly, the data, information and subsequent recommendations can make significant contributions to organizational effectiveness and mission accomplishment.

The data necessary for such analyses were collected by the Leadership and Management Development Center (LMDC) of the Air University at Maxwell AFB, Alabama. The data were collected via the Organizational Assessment Package (OAP), a survey questionnaire administered in the field and used to assess job attitudes of Air Force personnel. In order to address significant differences between the job attitudes of personnel assigned to PACAF and those of personnel assigned to other commands and theaters, the present study pursues four related objectives:

1. To review relevant background research and organizational behavior literature;
2. To compare OAP measured demographic characteristics and job attitudes of officers, enlisted personnel and civilians in PACAF with the corresponding characteristics and attitudes of personnel assigned to other USAF theaters and commands;
3. To analyze significant attitudinal differences between PACAF personnel and other USAF personnel; and

4. To develop recommendations for PACAF commanders and functional managers.

The above objectives will be addressed in the following fashion. Chapter Two consists of a literature review of the significant work in the field. Chapter Three develops the methodology for collecting the data and describes the instrument to be used. A brief description of the subjects of the study, PACAF personnel, is also presented in this chapter, along with a cursory description of the analytical procedures used in investigating differences in job attitudes. Chapter Four presents statistical analyses which form the basis for the conclusions and recommendations. Chapter Five takes the findings presented in the analytical phase and attempts to draw some conclusions as to their meaning. Finally, Chapter Six summarizes the findings and conclusions and presents some pertinent recommendations based on the analyses. The interested reader, critic, researcher or, most importantly, the commander in the field, can take action based on evidence presented herein to improve the organization or to perpetuate those things which are working well.

## Chapter Two

### LITERATURE REVIEW

The first major objective of this study is the review of relevant background research and organizational behavior literature. While much work has been done in the field of organizational behavior, little of that work has taken a regional focus. Specifically, in the Pacific theater, few analyses of job attitudes, organizational behavior or trends have been conducted. Therefore, the work discussed here necessarily takes a general perspective. The aim is to acquaint the reader with pertinent literature on the subject of organizational behavior, assessment, feedback and other current issues under investigation. The review is organized into five categories: organizational behavior, measurement variables, satisfaction, leadership, and reenlistment.

#### Organizational Behavior

A 1950 study, Productivity, Supervision and Morale in an Office Situation, by Katz, Maccoby and Morse, found that supervisors of high producing sections act differently than supervisors of lower producing sections. Generally, supervisors of higher producing sections regard supervision as the most important part of their work and spend most of

their time at it. They usually set up certain conditions within the work environment and allow employees to work out the details. Higher producing sections also show a higher degree of pride in their work.

It appears, therefore, that there may be at least some link between styles of leadership, pride and other attitudinal values and productivity. It might then be advisable to be able to measure some of these attributes. Surveys can help serve that function. Surveys can assist in feedback, diagnosis, communication, training, assessing corporate values and assessing the financial impact of employee attitudes (Nadler, 1977). When surveys are used for the purpose of organizational development via feedback, it is necessary to use data-based tools and processes. Feedback is one of the most important factors in this organizational development process. It can be most effective when used in conjunction with other forms of interventions. The user should also recognize that there are other sources of information besides surveys (Dunham & Smith, 1979).

Organizational Assessment, by Lawler, Nadler and Camman (1980), outlines the purposes and uses of organizational assessment data, establishes models for organizational assessment, reviews some of the available technology, defines the process of organizational assessment and sets forth conclusions about, and future directions for, organizational assessment. Indeed the field has not been lacking in



research. The following section summarizes some of the more significant efforts.

### **Measurement Variables**

A 1984 California study on the quality of work life (QWL) highlights seven predictors of QWL. They are the degree to which superiors treat workers with respect and have confidence in them, variety in daily work routine, work challenges, the extent to which present work leads to future opportunity, self-esteem, the extent to which life outside work affects life at work, and the extent to which the work contributes to society (Levine, Taylor, & Davis, 1984). Such measurement variables have been shown to be indicative measures of job attitudes.

A 1982 study showed a strong positive correlation between certain task attributes and productivity and job satisfaction, particularly as these attributes are perceived by the employees (Griffin, 1982). Another study in 1982, however, showed that when workers are satisfied they describe their jobs more favorably than their dissatisfied counterparts despite the fact that they may be doing the same job (Caldwell & O'Reilly, 1982). Thus, despite extensive work in the study and measurement of job satisfaction, causal links have yet to be established.

### **Satisfaction**

Three recent studies pertaining to the concept of job

satisfaction appear particularly interesting for the present work. The first addresses the relationship between role conflict, role ambiguity and job attitudes. In formulating job attitudes, workers show stability across organizational levels in terms of role conflict and job attitudes. However, role ambiguity and job attitudes are strongly related at the higher levels of organization (Drory, 1981).

At least two other variables have a direct relation to job satisfaction: control over determinants of success and work environment support for worker values. A University of Notre Dame work in 1981 studied internal versus external determinants of success. One finding was that belief in external control of the determinants of success was directly related to job satisfaction (Vecchio, 1981). An Indiana University study in 1981 found a relationship between work environment support of worker values and job satisfaction; in an environment of all satisfied workers, Wood (1981) found that nearly all worker values were being supported by the environment. It may be reasonable then to conjecture that an environment which supports worker values may have a direct, beneficial effect on job satisfaction. Leadership, of course, can play a significant role in the level of support perceived by the worker in his or her environment.

### **Leadership**

Three studies are looked at in the leadership area. First, it appears that senior officials in non-business

organizations tend to employ more of the directive style of leadership than the participatory, as compared to senior officials in business organizations (Chitayat & Venezia, 1984). This has direct relevance to the military organization, which is the subject of the present study. When an atmosphere of warmth is combined with the directive approach, however, productivity seems to increase. A Simon Fraser University study (Tjosvold, 1984) looked at warm directive, warm non-directive and cold styles of leadership in a work environment. The warm directive leader's group tended to be the most productive while the warm non-directive leader had the least productive group. Finally, structure seems at least partly responsible for job satisfaction, as discovered in a 1983 Temple University research effort (Zeitz, 1983). Zeitz found that "satisfaction is higher in more highly structured roles, contradictory of earlier findings" (p. 1088). This may be due, at least partly, to the fact that

Role clarity was an important predictor of satisfaction. . . . extensive and well enforced rules reduce anxiety and serve as a basis for reward seeking activity . . . members find clarity to be a source of satisfaction . . . by contrast close personal supervision, frequent checking and extensive use of sanctions breeds resentment and distrust. (Zeitz, 1983, p. 1102)

These findings play an important role in deciding the leadership style to be used with the group since attitudes may indirectly play a part in reenlistment decisions.

## **Reenlistment**

The first study analyzed in regard to reenlistment attitudes was a 1983 work at the Naval School of Health Science (LaRocco, 1983). Unfortunately, the main conclusion was to recommend further study. But, in the process, LaRocco discovered that attitudes toward the job had no effect on behavior (in this case reenlistment decision), although the study admits to weak relationships between attitudes and behavior. However, behavior (including the decision to leave the service) does have a greater influence on attitude than vice-versa (LaRocco, 1983). Thus, caution must be exercised in surveying the working force and in applying intervention to organizational problems until definitive conclusions are reached as to whether negative attitudes towards reenlistment follow the decision to leave the service or the other way around.

Motowidlo and Lawton (1984) established and tested three models on reenlistment decisions. They found that job satisfaction affected reenlistment decisions only to the extent that it affects the expectancy variables. That is, to the extent that a satisfied worker has more positive expectancy of the prospects of staying in the service then he or she is more likely to remain. No direct link was found, however, between job satisfaction and reenlistment intentions or decisions.

A final note on satisfaction versus reenlistment centers

on volunteer status of the subject group. Breugh (1981), in a University of Missouri study, found that volunteers are more likely "to report that they work for rewards of social interaction and service to others, that their work is more praiseworthy and that they are more satisfied and less likely to leave the organization" (p. 650). Therefore, although few definitive findings have been produced linking job attitudes and satisfaction with reenlistment, it would appear that those who volunteer for PACAF duty are more likely to be satisfied with their jobs and remain in the service.

### **Summary**

This review of pertinent literature leads to the following assumptions upon comparison with the initial data base. Assuming that job roles, and task characteristics remain fairly constant as the theater changes, then there is little reason to expect any significant differences in job attitudes between personnel assigned to PACAF and personnel assigned to other theaters. It is expected then, to find that job attitudes of PACAF personnel, as indicated on the OAP, will not vary significantly from the job attitudes of personnel assigned to the rest of the Air Force. The methodology used in conducting the analysis is addressed in the following chapter.

NO PRINT

## Chapter Three

### METHOD

This chapter explains the methodology employed in gathering and analyzing the data for this study. The method capitalizes on data collected in approximately 300,000 administrations of the Organizational Assessment Package (OAP). First, the OAP survey instrument is described. Second, the method for collecting the data is described. Third, a brief look at the subjects of the study, personnel assigned to PACAF, is provided. And finally, this chapter explains the procedure used in conducting the analysis.

### Instrumentation

Among other things, the mission of the LMDC includes conducting research on Air Force systemic issues, providing leadership and management training, and providing management consultation services. To carry out these functions, the LMDC, with the help of the Air Force Human Resources Laboratory at Brooks Air Force Base, Texas, developed a 109-item survey questionnaire to gather data. Sixteen of the 109 items collect demographic data while the remaining 93 items are used to measure 21 attitudinal factors. A description of the factors is contained in the Factors and Variables booklet

at Appendix C. These demographic measures and job attitude factors are then grouped into a systems model to assess three aspects of the work group. The first aspect, input, assesses the demographic data, the factors describing the work itself, and the factors describing job enrichment. The second aspect, work group process, assesses the pattern of activity and interaction among group members. The third, work group output, measures task performance, group development and effects on group members. Reliability of the instrument and adequacy for the collection of Air Force systemic data were verified by Short and Hamilton (1981) and by Hightower and Short (1982).

### **Data Collection**

All data in the present study were collected as part of LMDC consulting visits. The OAP is administered as one of the first and most crucial steps in a management consultation process, which is initiated upon the request of the unit commander. All work centers are included in the survey and all personnel present for duty are administered the survey in group settings. Only LMDC personnel handle the survey materials and respondents are assured of individual anonymity. About six weeks after the data are collected, the LMDC team returns to the unit to present the results of the data analysis to the unit commander and supervisors in the organization. The results are treated in a confidential



manner between LMDC and the client commander. At this point, the consultation team and the commander determine strengths, weaknesses and the need for corrective measures. Where intervention is indicated, the corrective action is recommended by the consultation team. Approximately six months after the intervention, the LMDC consultants return and re-administer the OAP to assess attitudinal changes. Through this process, the survey has been administered approximately 300,000 times to military members and civilian employees. Data gathered are maintained in a cumulative data base. The data used in this study represent those data gathered from 1 October 1981 through 16 September 1985 during the initial administrations of the OAP. That is, they represent pre-intervention attitudes as opposed to the data gathered during the follow-up visit six months after the intervention. Data gathered through this invitational process included several bases within the PACAF theater.

### **Subjects**

The OAP was administered to personnel at several typical PACAF bases. These include Andersen, Yokota, Clark, and Kadena as well as American personnel stationed at several Korean bases. The total PACAF sample responding to the survey for the LMDC data base included 278 officers, 1555 enlisted personnel and 149 civilians. With few exceptions, data collected reflected that the demographic characteristics

of PACAF personnel closely resembled those of other Air Force personnel in the main data base. In the officer and enlisted categories the male/female ratio was 85/15, or about the same as the ratio for the rest of the Air Force. The ratio for civilian employees, however, was different for PACAF than for the rest of the Air Force. The PACAF male/female ratio was 45/55 as compared to the male/female ratio for the rest of the Air Force of 60/40. A complete listing of the demographic data is provided at Appendix A. Note that the PACAF sample includes only those personnel assigned to the PACAF major command and does not include those personnel assigned to the Pacific theater but a different MAJCOM. Therefore, personnel assigned to SAC, DIA, or other commands stationed in the Pacific, as well as others in similar status, would not be included as part of the PACAF sample group.

### **Procedure**

Statistical analyses were performed using appropriate procedures contained in the Statistical Package for the Social Sciences (SPSS)<sup>X</sup> User's Guide (1983). The number (N) shown throughout this study is the total number of valid responses in the pre-intervention data base for the variable or key factor being examined. For the analysis of demographic information, the EMDC data were divided into two subgroups. The first group consists of those whose

major command was identified as PACAF. The second group is made up of those whose major command was not PACAF, that is, all remaining personnel in the data base. SPSS<sup>x</sup> subprogram "Crosstabs" was used to analyze demographic data.

In the attitudinal comparison of PACAF personnel to the data base the two subgroups were compared by personnel category: PACAF officers to other officers, PACAF enlisted personnel to other enlisted personnel, and PACAF civilians to other Air Force civil service employees. Two-tailed  $t$ -tests were performed to discern any attitudinal differences between groups within each personnel category. The level of significance for all  $t$ -tests was  $\alpha = .05$  (i.e., the 95% statistical confidence level). An  $F$ -test was used to test the assumption of equal variances. Where indicated appropriate,  $t$ -tests for unequal variance groups were used. These procedures were used to determine variables in which PACAF data vary significantly from the data base. The next chapter presents the results of the demographic and attitudinal comparisons.

NO PRINT

## Chapter Four

### RESULTS

This chapter presents the results of the OAP surveys administered to PACAF personnel as compared to the results of those administered to other USAF personnel. Complete demographic and attitudinal data are in the appendices. The demographic section represents the results of data collected on various demographic factors designed to describe the characteristics of comparison groups in complete detail. The attitudinal data compare the job attitudes of PACAF personnel with the job attitudes of other USAF personnel in terms of 21 attitudinal factors.

#### Demographic Data

Appendix A contains a detailed analysis of the demographic data collected. Tables 1, 2, and 3 highlight some of the more distinguishing characteristics of the subject group as compared with the data base.

Table 1

#### Sex by Personnel Category

Males(%) / Females(%)	PACAF	DATA BASE
officer	84.5/15.5	87.7/12.3
enlisted	86.9/13.1	88.3/11.7
civilian	45.3/54.7	59.8/40.2

Table 2

Age by Personnel Category

21 to 25 YRS(%)		PACAF	DATA BASE
	officer	5.4	12.4
	enlisted	39.2	38.1
	civilian	9.4	6.2

Table 3

Ethnic Group By Personnel Category

Asian/Pacific Islands(%)		PACAF	DATA BASE
	officer	5.4	1.4
	enlisted	3.4	2.0
	civilian	25.9	2.6
Black/Hispanic(%)			
	officer	10.1	8.1
	enlisted	28.1	21.3
	civilian	16.3	25.8

**Attitudinal Data**

Appendix B contains a detailed analysis of the attitudinal data collected. Of 21 factors measured, 15 factors had statistically significant differences between PACAF personnel and the data base in at least one of the personnel categories. The 15 factors which had statistically significant differences are summarized in Table 4. In each case the higher mean is highlighted. The 15 factors listed are those in which significant statistical differences exist in at least one of the three subgroupings of officer, enlisted or civilian. An asterisk following the reported mean marks the specific subcategory wherein that difference is found. Of the 15 factors

Table 4

## Factor Summary: Mean Scores and Significant Differences

			<u>Officer</u>	<u>Enlisted</u>	<u>Civilian</u>
Task Autonomy	PACAF	(P)	4.63	3.91*	4.75
	Data Base (DB)		4.55	3.83	4.58
Work Repetition		(P)	4.53*	5.21*	4.49
		(DB)	4.31	5.13	4.65
Desired Repetitive- Easy Tasks		(P)	2.65*	3.24	2.93
		(DB)	2.47	3.22	3.09
Skill Variety		(P)	5.57*	4.65	5.07
		(DB)	5.43	4.60	5.08
Task Identity		(P)	5.21	5.12*	5.42
		(DB)	5.22	5.05	5.33
Need for Enrichment		(P)	6.07	5.45	6.01*
		(DB)	6.09	5.47	5.69
Job Motivation Index		(P)	135.92*	104.08*	137.62
		(DB)	126.06	100.36	131.18
Work Support		(P)	4.76*	4.67*	5.10*
		(DB)	4.56	4.53	4.66
Management-Supervision		(P)	5.18	4.77	5.04
		(DB)	5.32	4.90*	4.98
Supervisory Communica- tions Climate		(P)	4.80	4.39	4.74
		(DB)	4.52	4.52*	4.57
Organizational Com- munications Climate		(P)	5.09*	4.40	5.09*
		(DB)	4.88	4.37	4.61
Advancement-Recognition		(P)	4.72*	4.31	4.10*
		(DB)	4.57	4.26	3.79
Work Group Effectiveness		(P)	5.96*	5.50	5.85*
		(DB)	5.77	5.46	5.64
Job Related Satisfaction		(P)	5.33	4.95	5.64*
		(DB)	5.36	4.96	5.42
General Organizational Climate		(P)	5.39*	4.37	5.25*
		(DB)	5.20	4.40	4.78

\* statistically significant difference in means.

where a significant difference exists, 1 factor was significantly different in all three categories, 7 factors differed for at least two categories and 7 factors had a significant difference in only one of the three personnel categories. While 15 factors differed to a statistically significant level, the degree to which the means differed was generally less than .20 mean scale points with only a few exceptions in the civilian category. The discussion in the following chapter will deal with those factors where a significant difference was detected in at least two personnel categories.



## Chapter Five

### Discussion

As conjectured in earlier chapters, job attitudes among military and civilian personnel assigned to PACAF vary little in comparison to the job attitudes expressed in the OAP by personnel assigned to other theaters or commands. Nonetheless, careful scrutinization of those differences may offer opportunities not only for further research but for possible action by top level management.

### Review

Analyses of the 21 factors measured by the OAP revealed statistically significant differences between job attitudes of PACAF personnel and those in other commands for 15 of those factors (Table 4). Generally, these differences were small and offered little justification for implementing change. However, seven factors indicated statistically significant differences of means in at least two of the three categories of officer, enlisted, and civilian personnel, and should be considered more carefully.

Causal relationships between these seven factors and demographic data, geographic preference of respondents, volunteer status of respondents or other variables are

difficult to establish, but speculation is nonetheless possible. Only one demographic characteristic is clearly out of the ordinary, and it is indeed possible that such a demographic divergence could account for the difference in responses to attitudinal issues.

Table A-B of Appendix A provides a statistical breakout of ethnic groups by personnel category. Note the significant difference among the civilian population. Air Force wide, Asian/Pacific Islands civilian employees account for 2.6% of the civilian work force whereas they account for 25.9% of the PACAF civilians. The proportions of Asian/Pacific Islanders are higher for officers and enlisted personnel as well, although not dramatically higher. "Blacks, Not Hispanic" are also higher for PACAF than for the data base. It is entirely within reason to assume that personnel in PACAF show greater satisfaction across most measured attitudinal factors because they adapt more easily to their off-duty environment, the climate, or general life style in their region. They may be more easily accepted among the indigenous populations, they may more readily assimilate the particular culture wherein they are assigned, or indeed, they may have been reared within that particular culture in the first place. Regardless of the particular conjecture, two facts remain clear. The two ethnic groups discussed are significantly more highly represented in PACAF and job satisfaction is greater in PACAF than elsewhere, for at least

seven measured attitudinal factors, to a significant degree.

This chapter, therefore, addresses those seven factors. Each factor is discussed in terms of the statistical data registered by the OAP as well as the conclusions which are inferred from the data. Finally, conclusions are presented in general terms so as to enable decision makers to choose among recommendations.

### Factors

This discussion addresses factors with a significant difference in at least two of the three personnel categories.

1. **Work Repetition:** Two PACAF personnel categories, officers and enlisted personnel, registered significantly higher means for the extent to which they faced the same tasks or problems in their job on a regular basis. These same personnel categories indicated higher means for the extent to which they desired repetitive tasks. Although the difference for the PACAF civilians was not statistically significant, it is interesting that this group indicated not only a lower level of work repetition in their jobs, but also a concomitantly lower level of desire for repetition. Note, therefore, the congruence of results for the factors of Work Repetition and Desired Repetitive Easy Tasks vis-a-vis the respondent personnel categories. These results seem to indicate a fairly consistent level of satisfaction among PACAF personnel regardless of the direction in which the

job attitude difference is registered. It may be conjectured that personnel in PACAF are more satisfied with the repetitive nature of their work because the level of repetition matches their desire for that repetition across all personnel categories. Indeed this may be one reason for their being in PACAF in the first place.

2. Job Motivation Index (JMI): This factor reflects overall motivating potential of the job. It reflects the degree to which the job prompts high internal work motivation (see Factors and Variables, Appendix C). Measurement is made by combining the results of six factors: Skill Variety, Task Identity, Task Significance, Job Feedback, Work Support, and Task Autonomy. The higher means are statistically significant for PACAF officers and enlisted personnel. The PACAF sample registered higher levels of satisfaction than the data base sample for Skill Variety, Task Significance, Job Feedback, Work Support and Task Autonomy. Civilians also registered higher means for JMI than their data base peers, although not to a significant degree. The data supports a conclusion that PACAF jobs are potentially more motivating to workers than jobs associated with other commands and theaters. No clear clues are available among the demographic data as to why PACAF jobs are intrinsically more motivating.

3. Work Support: This factor measures the level to which an individual's work environment is hindered by

additional duties, inadequate tools, etc. All three personnel categories in PACAF responded with means which differed significantly from their data base counterparts. PACAF respondents had significantly higher means, indicating greater satisfaction with the level of work support than the data base respondents. Civilians led the statistical difference with a .44 mean difference from their data base counterparts. Unanimity of opinion in this factor clearly indicates that worker needs for support by way of freedom from additional duties, adequacy of tools and equipment, and adequacy of work space are perceived as being better satisfied by PACAF organizations than by other Air Force organizations.

4. **Organizational Communications Climate:** All three personnel categories in PACAF indicated greater satisfaction with the communications environment in the organization than the data base sample. For officer and civilian categories, the differences were statistically significant. PACAF enlisted respondents likewise registered a slightly higher score for this factor. Overall, then, PACAF personnel appear to have a more open communications environment and more adequate information flow to accomplish their job than the data base respondents.

5. **Advancement-Recognition:** Mean differences in this very important factor were statistically significant for officer and civilian personnel. Civilians indicated a

.31 scale point higher level of satisfaction than the data base for recognition of their promotion potential, good performance, and advancement opportunity. PACAF enlisted personnel also tallied a higher mean in this category, although not statistically significant.

6. **Work Group Effectiveness:** Again all three personnel categories indicated higher levels of satisfaction than the data base for this factor, although only the officer and civilian categories were statistically significant. Overall, PACAF personnel indicated a higher degree of satisfaction with their group's ability to generate efficient, high quality work as compared to the rest of the data base.

7. **General Organizational Climate:** This factor measures the level of satisfaction with the work environment in terms of pride in the work, self-esteem, cooperation and general esprit de corps. Two personnel categories in PACAF, officers and civilians, registered higher mean scores to a statistically significant degree. The enlisted respondents had a lower mean among the PACAF sample than among the data base. The difference was not statistically significant, registering only a .03 difference in means between groups. The organizational climate, therefore, provides greater satisfaction among PACAF members than among others.

### **Summary**

The results of the OAP administration in the PACAF

theater indicate that, while differences in the job attitudes expressed by respondents vary little from the overall trends expressed by the rest of the Air Force, those differences generally favor the work environment in PACAF as compared with the data base. Of all the factors wherein a significant difference is registered by any personnel category, only one scores less favorably for PACAF than for the data base. Of the seven factors where significantly different mean scores were found in two or more personnel categories, all seven indicated greater satisfaction for PACAF respondents than for the data base. The results, therefore, clearly indicate that the PACAF work environment provides greater satisfaction to its employees than does the environment throughout the rest of the Air Force. Intervention is not indicated and only one recommendation is made.

#### Conclusion/Recommendation

The PACAF sample responded with job attitudes that reflected generally greater job satisfaction than the data base respondents. The logical conclusion, then, is that one ought not try to fix what isn't broken. Existing work practices and procedures appear to be providing the PACAF respondent with a level of satisfaction which is demonstrably, significantly higher than their peers in other commands and other theaters. One possible recommendation is offered.

Systems, procedures, and practices currently employed by PACAF units deserve careful analysis to establish or dismiss causal linkage between job satisfaction in PACAF and demographic factors, particular ethnicity. Where other than demographic factors are found to be the bases for greater job satisfaction, some degree of imitation of PACAF practices may be warranted. Specifically, those units, commands, or theaters currently experiencing difficulties with worker satisfaction and job attitudes should review PACAF standard operating procedures as a possible source for alternative solutions.



---

## REFERENCES

---

- Breaugh, J. A. (1981). Predicting absenteeism from prior absenteeism and work attitudes. *Journal of Applied Psychology*, 66, 555-560.
- Caldwell, D. F., & O'Reilly, C. A. III. (1982). Task perceptions and job satisfaction: A question of causality. *Journal of Applied Psychology*, 67, 361-369.
- Chitayat, G., & Venezia, I. (1984). Determinants of management styles in business and nonbusiness organizations. *Journal of Applied Psychology*, 69, 437-447.
- Drory, A. (1981). Organizational stress and job attitudes: Moderating effects of organizational level and task characteristics. *Psychological Reports*, 49, 139-146.
- Dunham, R. B., & Smith, F. J. (1979). *Organizational surveys*. Glenview, IL: Scott, Foresman.
- Fact Sheet 83-20. (1983, May). Pacific Air Forces. Washington, DC: United States Air Force, Office of Public Affairs.
- Griffin, R. W. (1982). Perceived task characteristics and employee productivity and satisfaction. *Human Relations*, 35, 927-938.
- Hightower, J. M., & Short, L. O. (1982). *Factor stability of the Organizational Assessment Package* (Report No. LMDC-TR-82-1). Maxwell AFB, AL: Leadership and Management Development Center.
- Katz, D., Maccoby, N., & Morse, N. C. (1950). *Productivity, supervision, and morale in an office situation*. Ann Arbor, MI: University of Michigan, Institute for Social Research.
- LaRocco, J. M. (1983). Job attitudes, intentions, and turnover: An analysis of effects using latent variables. *Human Relations*, 36, 813-826.

---

## CONTINUED

---

- Lawler, E. E., Nadler, D. A., & Camman C. (1980). Organizational assessment. New York: Wiley.
- Levine, M. F., Taylor, J. C., & Davis, L. E. (1984). Defining quality of working life. Human Relations, 37, 81-104.
- Motowidlo, S. J., & Lawton, G. W. (1984). Affective and cognitive factors in soldiers' reenlistment decisions. Journal of Applied Psychology, 69, 157-166.
- Nadler, D. (1977). Feedback & organization development: Using data based methods. Reading, MA: Addison-Wesley.
- PACAFP 26-4. (1985, April 15). What every PACAF commander should know about manpower but was afraid to ask. Hickam AFB, HI: Pacific Air Forces Manpower and Management Engineering Program.
- Short, L. O., & Hamilton, K. L. (1981). An examination of the reliability of the Organizational Assessment Package (LMDC-TR-81-2). Maxwell AFB, AL: Leadership and Management Development Center.
- SPSS<sup>X</sup> User's Guide. (1983). New York: McGraw-Hill.
- Tjosvold, D. (1984). Effects of leader warmth and directiveness on subordinate performance on a subsequent task. Journal of Applied Psychology, 69, 422-427.
- Vecchio, R. P. (1981). Workers' belief in internal versus external determinants of success. The Journal of Social Psychology, 114, 199-207.
- Wood, D. A. (1981). The Relation between work values and the perception of the work setting. The Journal of Social Psychology, 115, 189-193.
- Zeitz, G. (1983). Structural and individual determinants of organizational morale and satisfaction. Social Forces, 61, 1088-1103.

---

---

## APPENDIX

---

---

### Appendix A: Demographic Data

Table A-1

## Number of Respondents by Personnel Category

	PACAF (n)	Data Base (n)
Officer	278	12035
Enlisted	1555	68974
Civilians	149	24545

Table A-2

## Sex by Personnel Category

	PACAF			Data Base		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	277	1551	148	12005	68832	24339
Male	34.5	86.9	45.3	87.7	88.3	59.8
Female	15.5	13.1	34.7	12.3	11.7	40.2

Table A-3

## Age by Personnel Category

	PACAF			Data Base		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	278	1555	149	12035	68967	24539
17 to 20 yrs	.0	8.1	3.4	.0	13.9	1.2
21 to 25 yrs	5.4	39.2	9.4	12.4	38.1	6.2
26 to 30 yrs	29.1	20.5	13.4	27.9	19.5	10.5
31 to 35 yrs	23.7	16.0	12.1	23.5	14.5	14.4
36 to 40 yrs	22.3	10.9	14.1	19.5	9.8	14.1
41 to 45 yrs	12.6	3.5	9.4	11.1	2.9	12.6
46 to 50 yrs	3.6	.8	6.7	3.5	.7	14.0
> 50 yrs	3.2	1.0	31.5	2.1	.7	27.0

Table A-4

## Time in Air Force

	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	278	1551	131	12014	68791	21754
< 1 yr	.4	6.1	11.5	3.4	7.1	5.1
1 to 2 yrs	3.6	6.9	6.1	5.4	12.1	5.1
2 to 3 yrs	7.9	9.8	10.7	7.6	12.5	5.2
3 to 4 yrs	7.9	10.8	5.3	7.1	11.4	4.9
4 to 8 yrs	24.5	24.2	10.7	21.4	20.4	11.8
8 to 12 yrs	12.6	14.6	8.4	16.2	12.9	12.5
> 12 yrs	43.2	27.2	47.3	38.8	23.6	55.4

Table A-5

## Months in Present Career Field

	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	277	1544	146	11951	68575	23899
< 6 mos	3.2	3.4	4.8	5.3	4.9	5.6
6 to 12 mos	4.0	6.1	8.2	7.9	8.1	7.3
12 to 18 mos	4.0	3.9	6.2	8.0	8.3	6.0
18 to 36 mos	20.6	15.1	18.5	21.6	21.0	13.5
> 36 mos	68.2	71.5	62.3	57.3	57.6	67.6

Table A-6

## Months at Present Duty Station

	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	278	1551	149	11998	68625	23976
< 6 mos	10.1	13.7	5.4	13.9	15.4	6.3
6 to 12 mos	22.7	18.2	10.1	16.5	18.5	7.9
12 to 18 mos	14.0	12.6	13.4	16.3	16.2	6.2
18 to 36 mos	46.4	38.4	28.9	35.7	32.0	15.1
> 36 mos	6.8	17.0	42.3	17.7	17.8	64.6

Table A-7

## Months in Present Position

	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	277	1538	148	11990	68546	24129
< 6 mos	13.7	25.7	12.2	26.5	27.8	13.9
6 to 12 mos	29.6	23.0	18.9	24.8	24.1	14.8
12 to 18 mos	14.8	14.7	16.2	17.0	16.4	10.2
18 to 36 mos	36.1	26.2	25.0	24.5	22.6	19.6
> 36 mos	5.8	10.4	27.7	7.2	9.1	41.4

Table A-8

## Ethnic Group

	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	277	1543	147	11975	68486	24163
Amer Ind/Alas	1.4	1.0	2.7	.7	1.4	1.3
Asian/Pac Is	5.4	3.4	25.9	1.4	2.0	2.6
Black, Not Hisp	8.3	22.7	14.3	5.8	16.1	9.5
Hispanic	1.8	5.4	2.0	2.3	5.2	16.3
White, Not Hisp	79.4	63.2	50.3	87.7	71.8	67.3
Other	3.6	4.3	4.8	2.1	3.5	2.9

Table A-9

## Marital Status

	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	278	1549	148	12024	68852	24472
Not Married	17.6	32.7	12.2	21.1	35.6	18.6
Married	81.3	65.0	85.1	77.3	62.1	75.3
Single Parent	1.1	2.3	2.7	1.6	2.3	6.0

Table A-10

## Spouse Employment Status: PACAF

	Geographically Separated			Not Geo. Separated		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	13	85	7	213	922	119
Civilian Employed	76.9	56.5	57.1	35.2	39.5	22.7
Not Employed	7.7	23.5	42.9	54.9	46.0	28.6
Military Member	15.4	20.0	.0	9.9	14.5	48.7

Table A-11

## Spouse Employment Status: Data Base

	Geographically Separated			Not Geo. Separated		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	405	3418	1062	8889	39372	17367
Civilian Employed	58.5	58.6	69.2	34.4	37.9	54.4
Not Employed	20.5	26.5	17.5	57.0	48.0	34.3
Military Member	21.0	14.9	13.3	8.6	14.1	11.3

Table A-12

## Educational Level

	PACAF			Data Base		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	278	1546	146	12003	68722	24212
Non HS Grad	.0	.5	2.7	.0	.8	5.5
HS Grad or GED	.0	42.6	21.2	.2	45.2	29.1
<2 yrs College	.4	37.9	24.7	.3	34.5	23.9
>2 yrs College	.4	15.3	13.7	1.4	15.8	18.4
Bachelors	52.2	3.0	21.9	53.0	3.2	15.2
Masters	32.4	.6	15.1	37.3	.5	7.0
PHD	14.7	.1	.7	7.7	.0	1.0

Table A-13

## Professional Military Education

	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	277	1542	147	12020	68821	24413
None	29.2	21.2	81.0	34.4	31.8	78.5
Phase 1 or 2	.4	32.3	7.5	1.1	29.9	7.5
Phase 3	.7	23.9	.0	1.2	18.8	3.3
Phase 4	.0	13.1	2.0	.9	11.4	2.9
Sr NCO Academy	.0	7.0	2.7	.2	4.8	2.0
Sq Officer Sch	28.9	.2	1.4	26.7	.2	1.1
Int Service Sch	27.4	2.2	.7	23.2	2.9	3.4
Sr Service Sch	13.4	.1	4.8	12.3	.1	1.3

Table A-14

## Number of People Directly Supervised

	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	274	1522	148	11981	68504	24422
None	40.5	59.9	55.4	44.6	63.8	75.1
1 Person	9.5	8.7	4.1	6.8	6.9	2.4
2 People	7.7	6.2	5.4	5.9	6.6	2.1
3 People	9.1	5.7	4.1	7.6	5.0	2.3
4 to 5 People	13.5	8.0	12.8	13.0	7.2	4.4
6 to 8 People	7.3	5.3	7.4	9.6	4.3	3.7
9 or > People	12.4	6.3	10.8	12.5	6.2	10.0



Table A-15

Number People for Whom Respondent Writes APR/DER/Appraisal						
	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	274	1540	147	12007	68755	24472
None	50.7	62.0	66.0	51.5	66.7	78.8
1 Person	13.1	12.0	4.1	9.1	8.5	2.1
2 People	8.4	9.5	6.1	7.0	7.7	1.9
3 People	5.5	7.1	5.4	7.2	5.6	2.0
4 to 5 People	10.9	6.8	7.5	11.4	7.0	3.8
6 to 8 People	7.7	1.8	4.8	8.4	2.5	3.1
9 or > People	3.6	.7	6.1	5.4	2.0	8.2

Table A-16

Supervisor Writes Respondent's APR/DER/Appraisal						
	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	273	1519	145	11852	67976	23690
Yes	69.2	69.2	82.8	77.7	70.4	77.8
No	20.1	21.9	6.9	14.1	18.6	9.5
Not Sure	8.2	9.0	10.3	8.2	11.0	12.6

Table A-17

## Work Schedule

	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	276	1538	144	11911	68290	23990
Day Shift	58.3	59.8	93.1	59.4	60.1	87.9
Swing Shift	.0	8.9	1.4	.2	7.3	3.2
Mid Shift	.4	5.5	.0	.1	2.9	.8
Rotating Shift	9.8	8.9	.7	4.6	13.6	4.5
Irregular Sched	9.8	12.8	4.2	12.6	12.2	2.3
Freq TDY/On-call	14.9	2.4	.7	8.0	2.5	.9
Crew Schedule	6.9	1.7	.0	15.2	1.3	.3

Table A-18

## Supervisor Holds Group Meetings

	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	276	1524	146	11888	67860	24147
Never	8.3	20.9	19.9	6.6	16.3	10.0
Occasionally	20.7	34.9	28.8	23.1	33.8	34.7
Monthly	15.9	10.6	6.2	13.6	8.7	18.8
Weekly	27.2	23.6	43.2	42.7	27.5	30.2
Daily	26.1	8.3	1.4	12.0	11.6	4.5
Continuously	1.8	1.7	.7	2.1	2.2	1.8

Table A-19

## Supervisor Holds Group Meetings to Solve Problems

	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	277	1515	143	11822	67428	23817
Never	17.3	29.4	28.7	15.3	24.9	24.2
Occasionally	41.2	38.5	38.5	42.6	39.8	44.8
Half the Time	20.6	15.8	18.9	21.9	16.7	15.4
Always	20.9	16.2	14.0	20.2	18.6	15.7

Table A-20

## Aeronautical Rating and Current Status

n =	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
	278	1537	145	11865	67700	23142
Nonrated, noncrew	67.3	92.6	95.2	61.2	90.6	90.6
Nonrated, crew	1.1	2.3	.7	2.5	2.1	.5
Rated, crew/ops	17.6	1.7	1.4	27.1	1.6	1.6
Rated, support	14.0	3.4	2.8	9.3	5.8	7.3

Table A-21

## Career Intent

n =	-----PACAF-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
	276	1546	125	11968	68584	21070
Retire 12 Mos	1.1	2.2	8.0	3.5	3.1	6.3
Career	59.1	41.5	36.0	51.0	34.7	51.5
Likely Career	19.6	19.5	24.9	22.5	18.8	23.4
Maybe Career	12.7	19.4	19.2	15.1	20.7	12.6
Likely Separate	4.3	10.3	11.2	5.0	13.7	3.4
Separate	3.3	7.2	1.6	2.9	9.1	2.8

Note: The number (n) is the total number of valid responses for the factor being examined.

NO PRINT

---

---

## APPENDIX

---

---

Appendix B: Comparison of OAP Factor  
Scores Between PACAF and  
Other Air Force Personnel

Table B-1

Comparison of OAP Factor Scores Between PACAF  
and Other Air Force Personnel: The Work Itself

		n	Mean	SD	a df	t
Job Performance Goals:						
Off P	265	4.78	0.89	279	1.13	
DB	11573	4.72	0.99			
Enl P	1499	4.73	0.97	67857	-0.40	
DB	66360	4.74	0.98			
Civ P	143	4.90	1.02	23491	0.56	
DB	23350	4.85	1.00			
Task Characteristics:						
Off P	268	5.42	0.91	11897	1.37	
DB	11631	5.34	0.95			
Enl P	1469	5.08	0.96	1540	1.72	
DB	65606	5.04	1.00			
Civ P	139	5.31	0.91	23213	0.05	
DB	23076	5.31	0.95			

a - approximate degrees of freedom are given when t-test for groups with unequal variance is used.

\*  $p < .05$ .    \*\*  $p < .01$ .    \*\*\*  $p < .001$ .

Table B-1 (Cont.)

		n	Mean	SD	df	t
Task Autonomy:						
Off	P	268	4.63	1.44	11930	0.91
	DB	11664	4.55	1.36		
Enl	P	1446	3.91	1.44	67378	1.96
	DB	65934	3.83	1.42		
Civ	P	144	4.75	1.41	23681	1.48
	DB	23539	4.58	1.35		
Work Repetition:						
Off	P	274	4.53	1.38	12111	2.62**
	DB	11839	4.31	1.37		
Enl	P	1533	5.21	1.37	69343	2.26*
	DB	67812	5.13	1.37		
Civ	P	145	4.49	1.39	24189	-1.32
	DB	24046	4.65	1.43		
Desired Repetitive-Easy Tasks:						
Off	P	272	2.65	1.22	280	2.35*
	DB	11478	2.47	1.05		
Enl	P	1503	3.24	1.46	68074	0.50
	DB	66573	3.22	1.42		
Civ	P	142	2.93	1.38	23647	-1.36
	DB	23507	3.09	1.40		

a - approximate degrees of freedom are given when t-test for groups with unequal variance is used.

\* p < .05.    \*\* p < .01.    \*\*\* p < .001.

Table B-1 (Cont.)

	<u>n</u>	Mean	<u>SD</u>	<u>df</u>	<u>t</u>
Job Training:					
Off P	214	4.51	1.45	9592	-1.76
DB	9380	4.69	1.48		
Enl P	1469	4.54	1.50	1542	1.64
DB	64890	4.47	1.58		
Civ P	135	4.69	1.52	21958	1.49
DB	21825	4.47	1.68		

Table B-2

Comparison of OAF Factor Scores Between PACAF  
and other Air Force Personnel: Job Enrichment

	<u>n</u>	Mean	<u>SD</u>	<u>df</u>	<u>t</u>
Skill Variety:					
Off P	277	5.57	1.14	292	2.02*
DB	11918	5.43	1.29		
Enl P	1528	4.65	1.44	69273	1.37
DB	67747	4.60	1.46		
Civ P	144	5.07	1.36	24147	-0.05
DB	24005	5.08	1.37		

a - approximate degrees of freedom are given when t-test for groups with unequal variance is used.

\*  $p < .05$ .    \*\*  $p < .01$ .    \*\*\*  $p < .001$ .



Table B-2 (Cont.)

		n	Mean	SD	df	t
Task Identity:						
Off P	275	5.21	1.18	12158	-0.13	
DB	11885	5.22	1.21			
Enl P	1529	5.12	1.18	1605	2.33*	
DB	67859	5.05	1.25			
Civ P	147	5.42	1.11	24206	0.87	
DB	24061	5.33	1.17			
Task Significance:						
Off P	273	5.88	1.20	12209	1.10	
DB	11938	5.79	1.26			
Enl P	1530	5.74	1.26	1604	1.28	
DB	68263	5.70	1.31			
Civ P	146	5.73	1.20	24259	0.15	
DB	24115	5.71	1.26			
Job Feedback:						
Off P	276	5.00	1.11	12179	1.65	
DB	11905	4.88	1.18			
Enl P	1531	4.78	1.29	69592	0.60	
DB	68063	4.76	1.29			
Civ P	142	5.02	1.21	24260	-0.29	
DB	24120	5.06	1.27			

a - approximate degrees of freedom are given when t-test for groups with unequal variance is used.

\* p < .05.    \*\* p < .01.    \*\*\* p < .001.

Table B-2 (Cont.)

		n	Mean	SD	df <sup>a</sup>	t
Need for Enrichment:						
Off P	270	6.07	0.91	11904	-0.32	
DB	11636	6.09	0.86			
Enl P	1476	5.45	1.28	67609	-0.69	
DB	66135	5.47	1.24			
Civ P	141	6.01	1.02	142	3.62***	
DB	23283	5.69	1.18			
Job Motivation Index:						
Off P	245	135.92	74.34	253	2.06*	
DB	10895	126.06	67.21			
Enl P	1331	104.08	64.30	62689	2.13*	
DB	61360	100.36	62.89			
Civ P	133	137.62	70.25	21689	1.05	
DB	21558	131.18	70.40			

a - approximate degrees of freedom are given when t-test for q. ps with unequal variance is used.

\* p < .05.    \*\* p < .01.    \*\*\* p < .001.

Table B-3

Comparison of OAP Factor Scores Between PACAF and  
Other Air Force Personnel: Work Group Process

	<u>n</u>	Mean	<u>SD</u>	<u>df</u>	<u>t</u>
Work Support:					
Off P	261	4.76	1.02	11739	2.95**
DB	11480	4.56	1.09		
Enl P	1481	4.67	1.08	1552	4.93***
DB	66320	4.53	1.12		
Civ P	142	5.10	1.02	23460	4.62***
DB	23320	4.66	1.11		
Management and Supervision:					
Off P	263	5.18	1.40	11502	-1.63
DB	11241	5.32	1.34		
Enl P	1438	4.77	1.60	65786	-3.11**
DB	64350	4.90	1.58		
Civ P	141	5.04	1.69	22834	0.43
DB	22695	4.98	1.64		
Supervisory Communications Climate:					
Off P	256	4.80	1.46	11243	-0.68
DB	10984	4.86	1.42		
Enl P	1450	4.39	1.63	66041	-2.97**
DB	64593	4.52	1.64		
Civ P	134	4.74	1.71	22736	1.14
DB	22604	4.57	1.71		

a - approximate degrees of freedom are given when t-test for groups with unequal variance is used.

\*  $p < .05$ .    \*\*  $p < .01$ .    \*\*\*  $p < .001$ .

Table B-3 (Cont.)

	n	Mean	SD	df	t
Organizational Communications Climate:					
Off P	265	5.09	1.20	11341	2.63**
DB	11078	4.88	1.26		
Enl P	1445	4.40	1.31	64605	0.67
DB	63162	4.37	1.32		
Civ P	135	5.09	1.30	22358	3.93***
DB	22225	4.61	1.41		

Table B-4

Comparison of OAP Factor Scores Between PACAF and  
Other Air Force Personnel: Work Group Output

	n	Mean	SD	df	t
Pride:					
Off P	276	5.42	1.38	12145	-0.69
DB	11871	5.48	1.40		
Enl P	1509	4.83	1.62	69150	-1.71
DB	67643	4.90	1.65		
Civ P	147	5.50	1.45	24188	0.66
DB	24043	5.42	1.45		

a - approximate degrees of freedom are given when t-test for groups with unequal variance is used.

\* p < .05.    \*\* p < .01.    \*\*\* p < .001.

Table B-4 (Cont.)

	n	Mean	SD	df <sup>a</sup>	t
Advancement/Recognition:					
Off P	266	4.72	1.22	11660	2.00*
DB	11396	4.57	1.19		
Enl P	1465	4.31	1.21	66874	1.63
DB	65411	4.26	1.20		
Civ P	133	4.10	1.29	22528	2.65**
DB	22397	3.79	1.34		
	n	Mean	SD	df <sup>a</sup>	t
Work Group Effectiveness:					
Off P	272	5.96	0.97	287	3.15**
DB	11510	5.77	1.08		
Enl P	1477	5.50	1.23	66971	1.27
DB	65496	5.46	1.24		
Civ P	142	5.85	1.14	23357	2.00*
DB	23217	5.64	1.25		
	n	Mean	SD	df <sup>a</sup>	t
Job Related Satisfaction:					
Off P	243	5.33	1.12	10988	-0.44
DB	10747	5.36	1.09		
Enl P	1309	4.95	1.21	60903	-0.11
DB	59596	4.96	1.22		
Civ P	127	5.64	1.10	21963	2.31*
DB	21838	5.42	1.08		

a - approximate degrees of freedom are given when t-test for groups with unequal variance is used.

\* p < .05. \*\* p < .01. \*\*\* p < .001.

Table B-4 (Cont.)

	n	Mean	SD	df	t
General Organizational Climate:					
Off P	264	5.39	1.22	11422	2.50*
DB	11160	5.20	1.25		
Enl P	1430	4.37	1.41	64545	-0.94
DB	63117	4.40	1.40		
Civ P	134	5.25	1.29	22298	3.93***
DB	22166	4.78	1.40		

a - approximate degrees of freedom are given when t-test for groups with unequal variance is used.

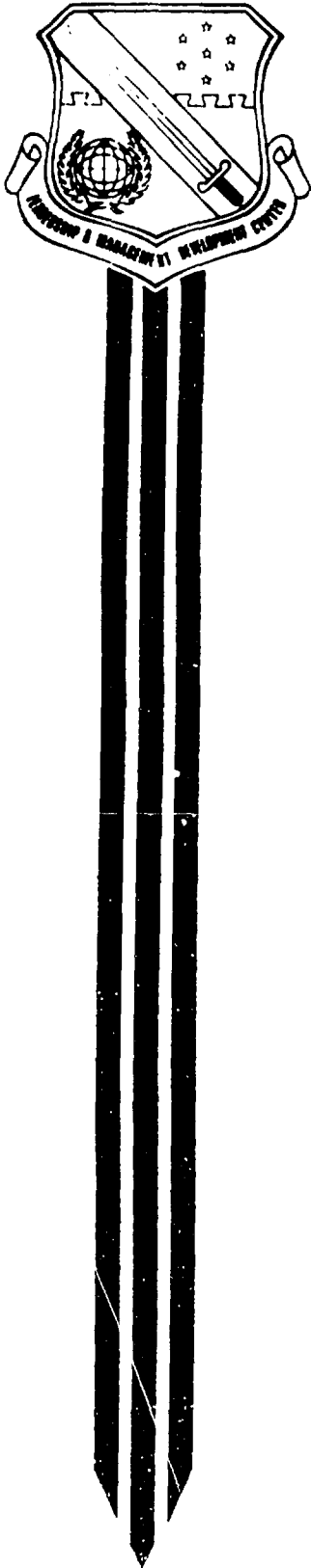
\*  $p < .05$ .    \*\*  $p < .01$ .    \*\*\*  $p < .001$ .

---

## APPENDIX

---

**Appendix C: Organizational Assessment  
Packaging Factors and Variables**



**ORGANIZATIONAL ASSESSMENT  
PACKAGE SURVEY**

**FACTORS  
AND  
VARIABLES**

**JANUARY 1986**

**Best Available Copy**

**LEADERSHIP AND MANAGEMENT DEVELOPMENT CENTER  
AIR UNIVERSITY**



# FACTORS AND VARIABLES OF THE ORGANIZATIONAL ASSESSMENT PACKAGE

The OAP is a 109-item survey questionnaire designed jointly by the Air Force Human Resources Laboratory and the Leadership and Management Development Center (LMDC) and is used to aid LMDC in its missions to: (a) conduct research on Air Force systemic issues using information in the OAP database, (b) provide leadership and management training, and (c) provide management consultation service to Air Force commanders upon request.

Allowable responses to the attitudinal items on the survey range from 1 (low) to 7 (high). The attitudinal items are grouped into 25 factors that address such areas as the job itself, management and supervision, communications, and performance in the organization. Each data record consists of 7 externally coded descriptors and 24 demographic items as well as the responses to the 93 attitudinal items.

The factors measured by the OAP are grouped into a systems model to assess three aspects of a work group: input, process, and output (adapted from McGrath's model).

Input. In LMDC's adaptation of the model, input is comprised of demographics, work itself, and job enrichment.

A. Demographics. Descriptive or background information about the respondents to the OAP survey.

B. Work Itself. The work itself has to do with the task properties (technologies) and environmental conditions of the job. It assesses the patterns of characteristics members bring to the group or organization, and patterns of differentiation and integration among position and roles. The following OAP factors measure the work itself:

- 806 - Job Desires (Need For Enrichment)
- 810 - Job Performance Goals
- 812 - Task Characteristics
- 813 - Task Autonomy
- 814 - Work Repetition
- 816 - Desired Repetitive Easy Tasks
- 823 - Job Related Training
- Job Influences (not a statistical factor)

C. Job Enrichment. Measures the degree to which the job itself is interesting, meaningful, challenging, and responsible. The following OAP factors measure job enrichment:

- 800 - Skill Variety
- 801 - Task Identity
- 802 - Task Significance
- 804 - Job Feedback
- 806 - Need for Enrichment Index (Job Desires)
- 807 - Job Motivation Index

- 808 - QJI Total Score
- 809 - Job Motivation Index - Additive
- 825 - Motivation Potential Score

Work Group Process. The work group assesses the pattern of activity and interaction among the group members. The following OAP factors measures leadership and the work group process:

- 805 - Performance Barriers/Blockages (Work Support)
- 818 - Management and Supervision
- 819 - Supervisory Communications Climate
- 820 - Organizational Communications Climate
- Work Interferences (not a statistical factor)
- Supervisory Assistance (not a statistical factor)

Work Group Output. Measures task performance, group development, and effects on group members. Assesses the quantity and quality of task performance and alteration of the group's relation to the environment. Assesses changes in positions and role patterns, and in the development of norms. Assesses changes on skills and attitudes, and effects on adjustment. The following OAP factors measure the work group output:

- 811 - Pride
- 817 - Advancement/Recognition
- 821 - Work Group Effectiveness (Perceived Productivity)
- 822 - Job Related Satisfaction
- 824 - General Organizational Climate

## EXTERNALLY CODED DESCRIPTORS

Batch Number  
Julian Date of Survey  
Major Command  
Base Code  
Consultation Method  
Consultant Code  
Survey Version

(Note: These items are concatenated to each data record during EDP processing.)

DEMOGRAPHIC ITEMS (NOT A STATISTICAL FACTOR)

Variable Number	Statement Number	Statement
-	-	Supervisor's Code
-	-	Work Group Code
-	-	Sex
-	-	Your age is
-	-	You are (officer, enlisted, GS, etc.)
-	-	Your pay grade is
-	-	Primary AFSC
-	-	Duty AFSC
(Note: The above items are on the response sheet.)		
001	-	(Not used)
002	-	(Not used)
003	1	Total years in the Air Force:
		1. Less than 1 year
		2. More than 1 year, less than 2 years
		3. More than 2 years, less than 3 years
		4. More than 3 years, less than 4 years
		5. More than 4 years, less than 6 years
		6. More than 6 years

3

Variable Number	Statement Number	Statement
004	2	Total months in present career field:
		1. Less than 1 month
		2. More than 1 month, less than 6 months
		3. More than 6 months, less than 12 months
		4. More than 12 months, less than 18 months
		5. More than 18 months, less than 24 months
		6. More than 24 months, less than 36 months
		7. More than 36 months
005	3	Total months at this station:
		1. Less than 1 month
		2. More than 1 month, less than 6 months
		3. More than 6 months, less than 12 months
		4. More than 12 months, less than 18 months
		5. More than 18 months, less than 24 months
		6. More than 24 months, less than 36 months
		7. More than 36 months
006	4	Total months in present position:
		1. Less than 1 month
		2. More than 1 month, less than 6 months
		3. More than 6 months, less than 12 months
		4. More than 12 months, less than 18 months
		5. More than 18 months, less than 24 months
		6. More than 24 months, less than 36 months
		7. More than 36 months
007	5	Your Ethnic Group is:
		1. American Indian or Alaskan Native
		2. Asian or Pacific Islander
		3. Black, not of Hispanic Origin
		4. Hispanic
		5. White, not of Hispanic Origin
		6. Other
008	11	Which of the following "best" describes your marital status?
		0. Not married.
		1. Married: Spouse is a civilian employed outside home.
		2. Married: Spouse is a civilian employed outside home - geographically separated.
		3. Married: Spouse not employed outside home.
		4. Married: Spouse not employed outside home - geographically separated.
		5. Married: Spouse is a military member.
		6. Married: Spouse is a military member - geographically separated.
		7. Single parent.

4

<u>Variable Number</u>	<u>Statement Number</u>	<u>Statement</u>	<u>Variable Number</u>	<u>Statement Number</u>	<u>Statement</u>
009	5	Your highest education level obtained is: 1. Non-high school graduate 2. High school graduate or GED 3. Less than two years college 4. Two years or more college 5. Bachelors Degree 6. Masters Degree 7. Doctoral Degree	014	11	Your work requires you to work primarily: 1. Alone 2. With one or two people 3. As a small work group (3-5 people) 4. As a large work group (6 or more people) 5. Other
010	7	Highest level of professional military education (residence or correspondence): 0. None or not applicable 1. MCO Orientation Course or USAF Supervisor Course (MCO Phase 1 or 2) 2. MCO Leadership School (MCO Phase 3) 3. MCO Academy (MCO Phase 4) 4. Senior MCO Academy (MCO Phase 5) 5. Squadron Officer School 6. Intermediate Service School (i.e., ACSC, AFSC) 7. Senior Service School (i.e., AWC, ICAF, WMC)	015	12	What is your usual work schedule? 1. Day shift, normally stable hours 2. Swing shift (about 1600-2400) 3. Mid shift (about 2400-0800) 4. Rotating shift schedule 5. Day or shift work with irregular/unstable hours 6. Frequent TDY/travel or frequently on-call to report to work 7. Crew schedule
011	8	How many people do you directly supervise? 1. None 2. 1 3. 2 4. 3 5. 4 to 5 6. 6 to 8 7. 9 or more	016	13	How often does your supervisor hold group meetings? 1. Never 2. Occasionally 3. Monthly 4. Weekly 5. Daily 6. Continuously
012	9	For how many people do you write performance reports? 1. None 2. 1 3. 2 4. 3 5. 4 to 5 6. 6 to 8 7. 9 or more	017	14	How often are group meetings used to solve problems and establish goals? 1. Never 2. Occasionally 3. About half the time 4. All of the time
013	10	Does your supervisor actually write your performance report? 1. Yes 2. No 3. Not sure	018	15	What is your aeronautical rating and current status? 1. Monrated, not on aircrew 2. Monrated, now on aircrew 3. Rated, in crew/operations job 4. Rated, in support job

Variable  
Number

Statement  
Number

16

Which of the following best describes your career or employment intentions?

1. Planning to retire in the next 12 months
2. Will continue in/with the Air Force as a career
3. Will most likely continue in/with the Air Force
4. May continue in/with the Air Force
5. Will most likely not make the Air Force a career
6. Will separate/terminate from the Air Force as soon as possible

NOTE: Variable 006, Statement 11 was added to the QAP on 19 Jan 80 and replaced variable 014 which appears on page 6. Although no longer used, Variable 014 is still shown because data collected from about 25,000 samples for this variable are still in the data base.

FACTORS

Each 800 series factor consists of two or more variables which correspond to statements in the QAP. A mean score can be derived for each factor except 805, 807, 808, 809 and 825 by using a "straight average." The formula for computing the exceptions is indicated.

FACTOR 800 - SKILL VARIETY: Measures the degree to which a job requires a variety of different tasks or activities in carrying out the work; involves the use of a number of different skills and talents of the worker; skills required are valued by the worker.

Variable Number	Statement Number	Statement
201	17	To what extent does your job require you to do many different things, using a variety of your talents and skills?
212	29	To what extent does your job require you to use a number of complex skills?

FACTOR 801 - TASK IDENTITY: Measures the degree to which the job requires completion of a "whole" and identifiable piece of work from beginning to end.

Variable Number	Statement Number	Statement
202	18	To what extent does your job involve doing a whole task or unit of work?
211	28	To what extent does your job provide you with a chance to finish completely the piece of work you have begun?

FACTOR 802 - TASK SIGNIFICANCE: Measures the degree to which the job has a substantial impact on the lives or work of others; the importance of the job.

Variable Number	Statement Number	Statement
203	19	To what extent is your job significant in that it affects others in some important way?
210	27	To what extent does doing your job well affect a lot of people?

FACTOR 803 (NOT USED)

FACTOR 804 - JOB FEEDBACK: Measures the degree to which carrying out the work activities required by the job results in the worker obtaining clear and direct information about job outcomes or information on good and poor performance.

Variable Number	Statement Number	Statement
272	22	To what extent are you able to determine how well you are doing your job without feedback from anyone else?
209	26	To what extent does your job provide the chance to know for yourself when you do a good job, and to be responsible for your own work?

FACTOR 805 - WORK SUPPORT: Measures the degree to which work performance is hindered by additional duties, details, inadequate tools, equipment, or work space.

Variable Number	Statement Number	Statement
206	23	To what extent do additional duties interfere with the performance of your primary job?
207	24	To what extent do you have adequate tools and equipment to accomplish your job?
208	25	To what extent is the amount of work space provided adequate?

Formula (8-206+207+208)/3

FACTOR 806 - NEED FOR ENRICHMENT INDEX (JOB DESIRES): Has to do with job related characteristics (autonomy, personal growth, use of skills, etc.) that the individual would like in a job.

Variable Number	Statement Number	Statement
		(In my job, I would like to have the characteristics described--from "no. at all" to "an extremely large amount")
249	51	Opportunities to have independence in my work.
250	52	A job that is meaningful.
251	53	The opportunity for personal growth in my job.
252	54	Opportunities in my work to use my skills.
253	55	Opportunities to perform a variety of tasks.

FACTOR 807 - JOB MOTIVATION INDEX: A composite index derived from the six job characteristics that reflect the overall "motivating potential" of a job; the degree to which a job will prompt high internal work motivation on the part of job incumbents.

Index is computed using the following factors:

800	Skill variety
801	Task identity
802	Task significance
803	Performance barriers/blockages
813	Task autonomy
804	Job feedback

Formula (800+801+802+803)/4+813+804

FACTOR 808 - QJI TOTAL SCORE: Assesses one's perception of motivation provided by his or her job. This factor is a variation of a scale employed by other job motivation theorists.

Score is computed using the variables in the following formula:

Formula (V201+V202+V203+V270+V271+V272  
+8+V206+V207+V208+V209+V210  
+V211+V212+V213)

FACTOR 803 - JOB MOTIVATION INDEX ----- ADDITIVE: This factor is a variation of a scale employed by other job motivation theorists.

Index is computed using the following factors:

- 800 Skill variety
- 801 Task identity
- 802 Task significance
- 803 Performance barriers/blockages
- 813 Task autonomy
- 804 Work repetition

$$\text{Formula } ((800+801+802+803)/4) \cdot 813 \cdot 804$$

FACTOR 810 - JOB PERFORMANCE GOALS: Measures the extent to which job performance goals are clear, specific, realistic, understandable, and challenging.

Variable Number	Statement
227	To what extent do you know exactly what is expected of you in performing your job?
218	To what extent are your job performance goals difficult to accomplish?
273	To what extent are your job performance goals clear?
274	To what extent are your job performance goals specific?
221	To what extent are your job performance goals realistic?

FACTOR 811 - PRIDE: Measures the pride in one's work.

Variable Number	Statement
215	To what extent are you proud of your job?
275	To what extent does your work give you a feeling of pride?

11

FACTOR 812 - TASK CHARACTERISTICS: A combination of skill variety, task identity, task significance, and job feedback designed to measure several aspects of one's job.

Variable Number	Statement
201	To what extent does your job require you to do many different things, using a variety of your talents and skills?
202	To what extent does your job involve doing a whole task or unit of work?
203	To what extent is your job significant, in that it affects others in some important way?
272	To what extent are you able to determine how well you are doing your job without feedback from anyone else?
209	To what extent does your job provide the chance to know for yourself when you do a good job, and to be responsible for your own work?
210	To what extent does doing your job well affect a lot of people?
211	To what extent does your job provide you with a chance to finish completely the piece of work you have begun?
212	To what extent does your job require you to use a number of complex skills?

FACTOR 813 - TASK AUTONOMY: Measures the degree to which the job provides freedom to do the work as one sees fit; discretion in scheduling, decision making, and means for accomplishing a job.

Variable Number	Statement
270	To what extent does your job provide a great deal of freedom and independence in scheduling your work?
271	To what extent does your job provide a great deal of freedom and independence in selecting your own procedures to accomplish it?
213	To what extent does your job give you freedom to do your work as you see fit?
214	To what extent are you allowed to make the major decisions required to perform your job well?

12

FACTOR 814 - WORK REPETITION: Measures the extent to which one performs the same tasks or faces the same type of problems in his or her job on a regular basis.

Variable Number	Statement Number	Statement
225	39	To what extent do you perform the same tasks repeatedly within a short period of time?
227	40	To what extent are you faced with the same type of problem on a weekly basis?

#### FACTOR 815 (NOT USED)

FACTOR 816 - DESIRED REPETITIVE EASY TASKS: Measures the extent to which one desires his or her job involve repetitive tasks or tasks that are easy to accomplish.

Variable Number	Statement Number	Statement
255	56	A job in which tasks are repetitive.
258	57	A job in which tasks are relatively easy to accomplish.

#### FACTOR - JOB INFLUENCES (NOT A STATISTICAL FACTOR):

Variable Number	Statement Number	Statement
216	33	To what extent do you feel accountable to your supervisor in accomplishing your job?
238	42	To what extent do co-workers in your work group maintain high standards of performance?

FACTOR 817 - ADVANCEMENT/RECOGNITION: Measures one's awareness of advancement and recognition, and feelings of being prepared (i.e., learning new skills for promotion).

Variable Number	Statement Number	Statement
234	41	To what extent are you aware of promotion/advancement opportunities that affect you?
239	43	To what extent do you have the opportunity to progress up your career ladder?

240	44	To what extent are you being prepared to accept increased responsibility?
241	45	To what extent do people who perform well receive recognition?
276	47	To what extent do you have the opportunity to learn skills which will improve your promotion potential?

FACTOR 818 - MANAGEMENT and SUPERVISION (A): Measures the degree to which the worker has high performance standards and good work procedures. Measures support and guidance received, and the overall quality of supervision.

Variable Number	Statement Number	Statement
404	58	My supervisor is a good planner.
405	59	My supervisor sets high performance standards.
410	60	My supervisor encourages teamwork.
411	61	My supervisor represents the group at all times.
412	62	My supervisor establishes good work procedures.
413	63	My supervisor has made his responsibilities clear to the group.
445	64	My supervisor fully explains procedures to each group member.
416	65	My supervisor performs well under pressure.

#### FACTOR - MANAGEMENT and SUPERVISION (B): (NOT A STATISTICAL FACTOR)

Variable Number	Statement Number	Statement
424	66	My supervisor takes time to help me when needed.
434	71	My supervisor lets me know when I am doing a poor job.
439	75	When I need technical advice, I usually go to my supervisor.

FACTOR 819 - SUPERVISORY COMMUNICATIONS CLIMATE: Measures the degree to which the worker perceives that there is good rapport with supervisors, that there is a good working environment, that innovation for task improvement is encouraged, and that rewards are based upon performance.

Variable Number	Statement Number	Statement
426	67	My supervisor asks members for their ideas on task improvements.
428	68	My supervisor explains how my job contributes to the overall mission.
431	69	My supervisor helps me set specific goals.
433	70	My supervisor lets me know when I am doing a good job.
435	72	My supervisor always helps me improve my performance.
436	73	My supervisor insures that I get job related training when needed.
437	74	My job performance has improved due to feedback received from my supervisor.
442	76	My supervisor frequently gives me feedback on how well I am doing my job.

FACTOR 820 - ORGANIZATIONAL COMMUNICATIONS CLIMATE: Measures the degree to which the worker perceives that there is an open communications environment in the organization, and that adequate information is provided to accomplish the job.

Variable Number	Statement Number	Statement
300	82	Ideas developed by my work group are readily accepted by management personnel above my supervisor.
301	83	My organization provides all the necessary information for me to do my job effectively.
302	84	My organization provides adequate information to my work group.
303	85	My work group is usually aware of important events and situations.
304	86	My complaints are aired satisfactorily.
309	91	The information in my organization is widely shared so that those needing it have it available.

15

- 314 96 My organization has clear-cut goals.  
 317 99 The goals of my organization are reasonable.  
 318 100 My organization provides accurate information to my work group.

FACTOR 821 - WORK GROUP EFFECTIVENESS: Measures one's view of the quantity, quality, and efficiency of work generated by his or her work group.

Variable Number	Statement Number	Statement
259	77	The quantity of output of your work group is very high.
260	78	The quality of output of your work group is very high.
261	79	When high priority work arises, such as short suspenses, crash programs, and schedule changes, the people in my work group do an outstanding job in handling these situations.
264	80	Your work group always gets maximum output from available resources (e.g., personnel and material).
265	81	Your work group's performance in comparison to similar work groups is very high.

FACTOR - WORK INTERFERENCES (NOT A STATISTICAL FACTOR): Identifies things that impede an individual's job performance.

Variable Number	Statement Number	Statement
277	48	To what extent do you have the necessary supplies to accomplish your job?
278	49	To what extent do details (task not covered by primary or additional duty descriptions) interfere with the performance of your primary job?
279	50	To what extent does a bottleneck in your organization seriously affect the flow of work either to or from your group?

16



FACTOR 822 - JOB RELATED SATISFACTION: Measures the degree to which the worker is generally satisfied with factors surrounding the job.

Variable Number	Statement Number	Statement
705	101	Feeling of Helpfulness The chance to help people and improve their welfare through the performance of my job. The importance of my job performance to the welfare of others.
709	102	Co-worker Relationships My amount of effort compared to the effort of my co-workers, the extent to which my co-workers share the load, and the spirit of teamwork which exists among my co-workers.
710	103	Family Attitude Toward Job The recognition and the pride my family has in the work I do.
717	106	Work Schedule My work schedule; flexibility and regularity of my work schedule; the number of hours I work per week.
718	107	Job Security
719	108	Acquired Valuable Skills The chance to acquire valuable skills in my job which prepare me for future opportunities
723	109	My Job as a Whole

FACTOR 823 - JOB RELATED TRAINING: Measures the extent to which one is satisfied with on-the-job and technical training received.

Variable Number	Statement Number	Statement
711	104	On-the-Job Training (OJT) The OJT instructional methods and instructors' competence.
712	105	Technical Training (Other than OJT) The technical training I have received to perform my current job.

FACTOR 824 - GENERAL ORGANIZATIONAL CLIMATE: Measures the individual's perception of his or her organizational environment as a whole (i.e. spirit of teamwork, communications, organizational pride, etc.).

Variable Number	Statement Number	Statement
305	87	My organization is very interested in the attitudes of the group members toward their jobs.
306	88	My organization has a very strong interest in the welfare of its people.
307	89	I am very proud to work for this organization.
308	90	I feel responsible to my organization in accomplishing its mission.
310	92	Personnel in my unit are recognized for outstanding performance.
311	93	I am usually given the opportunity to show or demonstrate my work to others.
312	94	There is a high spirit of teamwork among my co-workers.
313	95	There is outstanding cooperation between work groups of my organization.
315	97	I feel motivated to contribute my best efforts to the mission of my organization.
316	98	My organization rewards individuals based on performance.

FACTOR 825 - MOTIVATION POTENTIAL SCORE: This factor is another variation of a scale employed by other job motivation theorists. The score ranges between 1 and 343 with 109 being the Air Force average. Low scores indicate a poorly motivating job. Score is computed using the following factors:

800	Skill variety
801	Task identity
802	Task significance
804	Job feedback
813	Task autonomy

Formula ( 800+801+802)/31+813+904

# VARIABLES

Variable Number	Factor	Statement Number	Statement	Variable Number	Factor	Statement Number	Statement
221	800/812	17	To what extent does your job require you to do many different things, using a variety of your talents and skills?	213	813	30	To what extent does your job give you freedom to do your work as you see fit?
222	801/812	18	To what extent does your job involve doing a whole task or unit of work?	214	813	31	To what extent are you allowed to make the major decisions required to perform your job well?
223	802/812	19	To what extent is your job significant, in that it affects others in some important way?	215	811	32	To what extent are you proud of your job?
224 & 205	--	--	(Not used)	216*	--	33	To what extent do you feel accountable to your supervisor in accomplishing your job?
226	805	23	To what extent do additional duties interfere with the performance of your primary job?	217	810	34	To what extent do you know exactly what is expected of you in performing your job?
227	805	24	To what extent do you have adequate tools and equipment to accomplish your job?	218	810	35	To what extent are your job performance goals difficult to accomplish?
228	805	25	To what extent is the amount of work space provided adequate?	219 & 220	--	--	(Not used)
229	804/812	26	To what extent does your job provide the chance to know for yourself when you do a good job, and to be responsible for your own work?	221	810	38	To what extent are your job performance goals realistic?
210	802/812	27	To what extent does doing your job well affect a lot of people?	222-225	--	--	(Not used)
211	801/812	28	To what extent does your job provide you with a chance to finish completely the piece of work you have begun?	226	814	39	To what extent do you perform the same tasks repeatedly within a short period of time?
212	800/812	29	To what extent does your job require you to use a number of complex skills?	227	814	40	To what extent are you faced with the same type of problem on a weekly basis?

\* This variable is an element of "Job Influences" (not a statistical factor).

Variable Number	Factor	Statement	Statement Number
228-233	--	(Not used)	--
234	817	To what extent are you aware of promotion/advancement opportunities that affect you?	41
235-237	--	(Not used)	--
238*	--	To what extent do co-workers in your work group maintain high standards of performance?	42
239	817	To what extent do you have the opportunity to progress up your career ladder?	43
240	817	To what extent are you being prepared to accept increased responsibility?	44
241	817	To what extent do people who perform well receive recognition?	45
242-248	--	(Not used)	--
249	806	Opportunities to have independence in my work?	51
250	806	A job that is meaningful.	52
251	806	The opportunity for personal growth in my job.	53
252	806	Opportunities in my work to use my skills.	54
253	806	Opportunities to perform a variety of tasks.	55
254	--	(Not used)	--
255	816	A job in which tasks are repetitive.	56

This variable is an element of "job influences" (not a statistical factor).

Variable Number	Factor	Statement	Statement Number
256 & 257	--	(Not used)	--
258	816	A job in which tasks are relatively easy to accomplish.	57
259	821	The quantity of output of your work group is very high.	77
260	821	The quality of output of your work group is very high.	78
261	821	When high priority work arises, such as short suspenses, crash programs, and schedule changes, the people in my work group do an outstanding job in handling these situations.	79
262 & 263	--	(Not used)	--
264	821	Your work group always gets maximum output from available resources (e.g., personnel and material).	80
265	821	Your work group's performance in comparison to similar work groups is very high.	81
266-269	--	(Not used)	--
270	813	To what extent does your job provide a great deal of freedom and independence in scheduling your work?	20
271	813	To what extent does your job provide a great deal of freedom and independence in selecting your own procedures to accomplish it?	21
272	804/812	To what extent are you able to determine how well you are doing your job without feedback from anyone else?	22

Variable  
Number

Factor

Statement  
Number

273	810	36	To what extent are your job performance goals clear?
274	810	37	To what extent are your job performance goals specific?
275	811	46	To what extent does your work give you a feeling of pride?
276	817	47	To what extent do you have the opportunity to learn skills which will improve your promotion potential?
277**	--	49	To what extent do you have the necessary supplies to accomplish your job?
278**	--	49	To what extent do details (task not covered by primary or additional duty descriptions) interfere with the performance of your primary job?
279**	--	50	To what extent does a bottleneck in your organization seriously affect the flow of work either to or from your group?
280-299	--	--	(Not used)
300	820	82	Ideas developed by my work group are readily accepted by management personnel above my supervisor.
301	820	83	My organization provides all the necessary information for me to do my job effectively.
302	820	84	My organization provides adequate information to my work group.

\*\* These variables are elements of "work interferences" (not a statistical factor).

Variable  
Number

Factor

Statement  
Number

303	820	85	My work group is usually aware of important events and situations.
304	820	86	My complaints are aired satisfactorily.
305	824	87	My organization is very interested in the attitudes of the group members toward their jobs.
306	824	88	My organization has a very strong interest in the welfare of its people.
307	824	89	I am very proud to work for this organization.
308	824	90	I feel responsible to my organization in accomplishing its mission.
309	820	91	The information in my organization is widely shared so that those needing it have it available.
310	824	92	Personnel in my unit are recognized for outstanding performance.
311	824	93	I am usually given the opportunity to show or demonstrate my work to others.
312	824	94	There is a high spirit of teamwork among my co-workers.
313	824	95	There is outstanding cooperation between work groups of my organization.

Variable  
Number

Factor

Statement  
Number

Factor

Statement  
Number

314 820 96 My organization has clear-cut goals.  
315 824 97 I feel motivated to contribute my best efforts to the mission of my organization.  
316 824 98 My organization rewards individuals based on performance.  
317 820 99 The goals of my organization are reasonable.  
318 820 100 My organization provides accurate information to my work group.  
319-403 -- -- (Not used)  
404 818 58 My supervisor is a good planner.  
405 818 59 My supervisor sets high performance standards.  
406-409 -- -- (Not used)  
410 818 60 My supervisor encourages teamwork.  
411 818 61 My supervisor represents the group at all times.  
412 818 62 My supervisor establishes good work procedures.  
413 818 63 My supervisor has made his responsibilities clear to the group.  
414 & 415 -- -- (Not used)  
416 818 65 My supervisor performs well under pressure.  
417-423 -- -- (Not used)  
424\*\*\* -- 66 My supervisor takes time to help me when needed.  
425 -- -- (Not used)

\*\*\* This variable is an element of "supervisory assistance" (not a statistical factor).

Variable  
Number

Factor

Statement  
Number

Factor

Statement  
Number

426 819 67 My supervisor asks members for their ideas on task improvements.  
427 -- -- (Not used)  
428 819 68 My supervisor explains how my job contributes to the overall mission.  
429 & 430 -- -- (Not used)  
431 819 69 My supervisor helps me set specific goals.  
432 -- -- (Not used)  
433 819 70 My supervisor lets me know when I am doing a good job.  
434\*\*\* -- 71 My supervisor lets me know when I am doing a poor job.  
435 819 72 My supervisor always helps me improve my performance.  
436 819 73 My supervisor insures that I get job related training when needed.  
437 819 74 My job performance has improved due to feedback received from my supervisor.  
438 -- -- (Not used)  
439\*\*\* -- 75 When I need technical advice, I usually go to my supervisor.  
440 & 441 -- -- (Not used)  
442 819 76 My supervisor frequently gives me feedback on how well I am doing my job.  
443 & 444 -- -- (Not used)  
445 818 64 My supervisor fully explains procedures to each group member.  
446-704 -- -- (Not used)

\*\*\* These variables are elements of "supervisory assistance" (not a statistical factor).

<u>Variable Number</u>	<u>Factor</u>	<u>Statement Number</u>	<u>Statement</u>
705	822	101	Feeling of Helpfulness The chance to help people and improve their welfare through the performance of my job. The importance of my job performance to the welfare of others.
706-708	--	--	(Not used)
709	822	102	Co-worker Relationships My amount of effort compared to the effort of my co-workers, the extent to which my co-workers share the load, and the spirit of teamwork which exists among my co-workers.
710	822	103	Family Attitude Toward Job The recognition and the pride my family has in the work I do.
711	823	104	On-the-Job Training (OJT) The OJT instructional methods and instructors' competence.
712	823	105	Technical Training (Other than OJT) The technical training I have received to perform my current job.
713-716	--	--	(Not used)
717	822	106	Work Schedule My work schedule; flexibility and regularity of my work schedule; the number of hours I work per week.
718	822	107	Job Security
719	822	108	Acquired Valuable Skills The chance to acquire valuable skills in my job which prepare me for future opportunities.
720-722	--	--	(Not used)
723	822	109	My Job as a Whole
724-999	--	--	(Not used)